Cyber S&T COI Needs Statement

Response Date: August 8, 2017 (5PM EDT)

The Department of Defense, Rapid Reaction Technology Office (RRTO) will conduct a Solutions Meeting to support the Cyber S&T Community of Interest (COI). The Solutions Meeting will take place in late October in McLean, VA. The Meeting provides selected innovative companies with an opportunity to make short technical presentations to government representatives about their technologies and products. There is a potential for companies to be selected for pilot projects or experimentation if their technology appears to match the DoD's cyber needs.

The COI is looking for innovative technologies and capabilities that support the cyber domain in the following areas:

Autonomous Cyber Defense

- Artificial Intelligence / Machine Learning
 - Adaptive defenses and self-securing systems
 - Real-time blocking
 - Vulnerability enumeration
 - Autonomic cyber resilience
- Cueing & orchestration of defenses and remediation
- Automated obfuscation, deception, resource reallocation
- Continuous monitoring from bus to user level
- Configuration tools for cyberspace operations

Cyber Situational Awareness / Planning / Decision Support

- Risk assessment, planning, and Course of Action support
- Visibility of missions, systems, and adversaries
 - Human understandable cyber situational awareness
 - o Internal and external network visibility
 - Consequence/outcome analysis
- Automated mission mapping to infrastructure
- Threat reporting
- Identification and attribution of network activity of users and devices
- Distributed collaboration tools for cyber defenders
- Advanced analytics / data science / big data for cyber
 - Federated data sources/analytic environments
 - Correlation, integration, and fusion of disparate data sources
 - Interoperable analytic platforms
 - Isolated, edge, and low bandwidth/computing environments

Cybersecurity for Infrastructure, Endpoints, and Edge Devices

- Rapidly deployable tools
 - Network mapping/awareness
 - Discovery, response, and eradication of attacks
 - Analysis for computing & bandwidth constrained environments
- Device and software anonymization

- Sandboxing, containerization, and restoration to known good states
- Secure browser technology
- Securing hard to patch infrastructure and legacy systems
- Anti-credential harvesting
- Advanced threat identification

Control Systems / Internet of Things (IoT) Security

- Manage, Monitor, Detect, and Alert abnormal behaviors
 - Integration with larger security management ecosystem
 - Patch management & validation
 - Automated identification of devices and protocols
 - IP to physical Layer
 - Across multiple protocols
- Control system risk profiles management
- Vehicle (aviation, ground, marine) networks and controllers
- Anti-tamper / resiliency mechanisms

Hardware & Software Assurance

- Scalable, intelligent code/software analysis and repair
- Embedded SW/firmware
- Anti-Tamper / Anti-Counterfeit / Trusted and Assured Computing
- HW vulnerability mitigation
- Secure/verifiable design with split/third party manufacturing
- Non-destructive reverse engineering
- Trusted partitioning in low power devices
- HW authentication, root of trust, encryption for SoC

Companies interested in participating in the Solutions Meeting should submit an application to RRTO Innovation via e-mail to osd.pentagon.ousd-atl.mbx.rrto-innovation@mail.mil.

The following information is required in the application (Note: Only 1 application is permitted per company NOT 1 application per topic area):

- 1. Email subject line "RRTO Solutions Meeting Application"
- 2. Company name
- 3. Website address
- 4. POC, email, phone number and an alternate POC if desired
- 5. A succinct description (less than 100 words in length) of the company's technology that it proposes to present at the Solutions Meeting.
- 6. Map the technology to the ONE Needs Area you believe BEST fits your solution.

All applications must be received on or before 5:00 PM EDT, August 8, 2017.

Selected companies are responsible for their travel and all other expenses associated with participation in the RRTO Solutions Meeting.